



# 613 SERIES

- Designed for severe high solids environments such as sewage, lift stations, storm canals, wet wells and slurry tanks where sludge, slurry or turbulence may be present
- Ideal for a wide variety of industrial and municipal liquid level measurement applications requiring watertight protection
- Welded at cap and base to provide a leak-tight seal
- Highly accurate, shock resistant and extremely stable over long periods of time
- Standard 1/2" NPT conduit for attaching lifting rings or mounting brackets
- Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- Ranges from 0 inH<sub>2</sub>O to 50 inH<sub>2</sub>O through 0 psi to 300 psi (higher ranges available on request)
- Corrosion resistant 316L stainless steel construction
- Reverse polarity protection and short circuit protection are standard
- Optional 5 to 30 Vdc input for 0.5 to 2.5 Vdc output, for field applications
- Optional integrated temperature measurement (PT100 RTD)

## FEATURES

- Advanced diffused semi-conductor and sputtered thin film sensor for maximum stability
- High accuracy and long term stability
- Ranges from 0 inH<sub>2</sub>O to 50 inH<sub>2</sub>O through 0 psi to 300 psi
- Corrosion resistant stainless steel construction
- Optional 5-30 Vdc input for 0.5 to 2.5 Vdc output, for field applications
- Optional integrated temperature measurement (PT100 RTD)

## APPLICATIONS

- Sewage
- Lift stations
- Storm canals
- Wet wells
- Slurry tanks

## SPECIFICATIONS

<b>Output signals</b>	4 mA to 20 mA, 2-wire; 0 Vdc to 5 Vdc and 0 Vdc to 10 Vdc, 3-wire; 0.5 Vdc to 2.5 Vdc, 3-wire
<b>Pressure ranges</b>	0 in H <sub>2</sub> O to 50 in H <sub>2</sub> O through 0 psig to 300 psig
<b>Proof pressure</b>	2 times range
<b>Burst pressure</b>	4 times range
<b>Accuracy</b>	± 0.25% full scale (BFSL); optional ± 0.125% full scale (BFSL); (includes the effects of non-linearity, hysteresis, non-repeatability, zero point and full scale errors)
<b>Repeatability</b>	≤ ± 0.05% full scale
<b>Electrical connection</b>	Submersible 1/2" NPT conduit
<b>Hysteresis</b>	≤ ± 0.1% full scale
<b>Stability</b>	≤ ± 0.2% full scale for 1 year, non-accumulating
<b>Load limitations</b>	≤ (V <sub>Power</sub> -10)/0.020 Amp for 4 mA to 20 mA ≥ 10,000 Ω for 0 Vdc to 10 Vdc, 3-wire ≥ 5,000 Ω for 0 Vdc to 5 Vdc, 3-wire
<b>Wetted materials</b>	Housing: 316 stainless steel Cage seal: All 316 stainless steel Cable: Polyurethane, FEP available on special versions
<b>Power supply*</b>	10 Vdc to 30 Vdc (4 mA to 20 mA, 2-wire) 10 Vdc to 30 Vdc (0 Vdc to 5 Vdc, 3-wire) 5 Vdc to 30 Vdc (0.5 Vdc to 2.5 Vdc, 3-wire) 14 Vdc to 30 Vdc (0 Vdc to 10 Vdc, 3-wire)
<b>Temperature ranges</b>	Compensated 32 °F to 122 °F (0 °C to 50 °C) Effect ± 0.01%/ °F for zero and span Storage -22 °F to 175 °F (-30 °C to 80 °C) Medium 14 °F to 122 °F (-10 °C to 50 °C)
<b>Temperature measurement</b>	Optional PT100, 4-wire per IEC 60751
<b>Response time</b>	≤ 1 ms (between 10% and 90% full scale)
<b>Environmental protection</b>	NEMA 6P, IP68
<b>Electromagnetic rating</b>	2004/108/EEC, EN 61326 Emission (Group 1, Class B) and Immunity (industrial locations)
<b>Electrical protection</b>	Reverse polarity protection, short circuit and optional lightning protection per EN 6100-4-5; 1.5J
<b>Shock</b>	Less than ± 0.05% full scale effect for 100 g's @ 20 ms on any axis
<b>Vibration</b>	Less than ± 0.01% full scale effect for 15 g's @ 0 Hz to 2,000 Hz on any axis
<b>Weight</b>	Approximately 3.2 lb. - cable extra

\* Unregulated power supplies

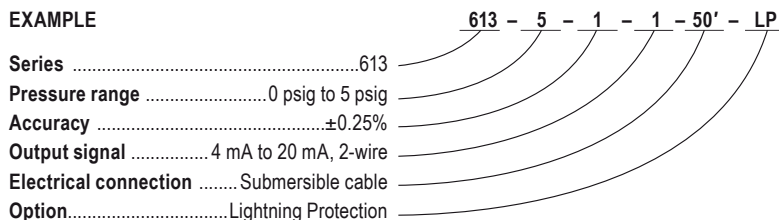
O'Keefe Controls Co.

ORDERING INFORMATION				
<b>SERIES</b>	613			
<b>PRESSURE RANGES</b>	5 0 psi to 5 psi (11.55 ft/H <sub>2</sub> O)	20 0 psi to 20 psi (46.20 ft/H <sub>2</sub> O)	75 0 psi to 75 psi (173.25 ft/H <sub>2</sub> O)	300 0 psi to 300 psi (693 ft/H <sub>2</sub> O)
	10 0 psi to 10 psi (23.10 ft/H <sub>2</sub> O)	30 0 psi to 30 psi (69.30 ft/H <sub>2</sub> O)	100 0 psi to 100 psi (231.00 ft/H <sub>2</sub> O)	
	15 0 psi to 15 psi (34.65 ft/H <sub>2</sub> O)	50 0 psi to 50 psi (115.50 ft/H <sub>2</sub> O)	150 0 psi to 150 psi (346.50 ft/H <sub>2</sub> O)	
<b>ACCURACIES</b>	1 ±0.25% full scale (BFSL)		2 ±0.125% full scale (BFSL)	
<b>OUTPUT SIGNALS</b>	1 4 mA to 20 mA, 2-wire		5 0 Vdc to 10 Vdc, 3-wire	
	2 0 Vdc to 5 Vdc, 3-wire		11 0.5 Vdc to 2.5 Vdc, 3-wire	
<b>ELECTRICAL CONNECTIONS</b>	-XX Standard Polyurethane (PUR) cable		-38-XX FEP cable	
	NOTE: XX=length of cable in feet.			
<b>OPTIONS</b>	CC Cable Clamp	FE Filter Element	LP Lightning Protection <sup>1</sup>	PT1 PT100 RTD <sup>1</sup>
	DC Desiccant Cartridge	JB Cable Junction Box (NEMA 4X)	LR Lifting Ring	

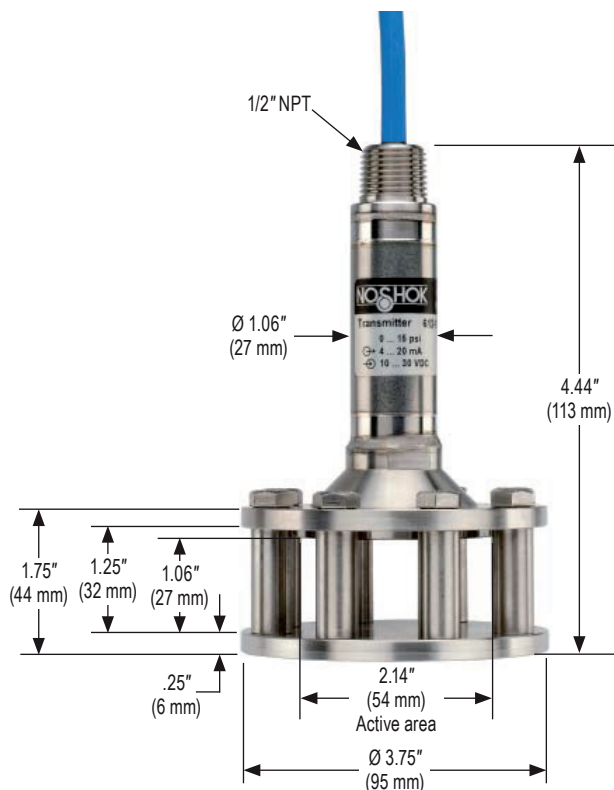
<sup>1</sup> Only available with PUR cable

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

**EXAMPLE**



**Outline Dimensions**



Optional Cable Clamp



Optional Cable Junction Box



Optional Filter Element



Optional Desiccant Cartridge



Optional Lifting Ring



*Specialists in Valves, Controls,  
Pneumatics, Fluid Measurement*